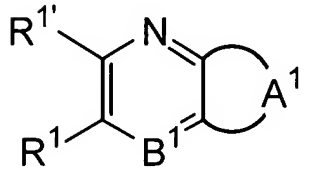
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A compound of the general formula (I):



(I)

~~a prodrug,~~ or a pharmaceutically acceptable salt ~~or a solvate~~ thereof; wherein:

B^1 is $-C(R^2)=$ ~~or -N=~~;

one of R^1 and R^2 is a group of the formula: $-Z^1-Z^2-Z^3-R^5$ wherein

Z^1 and Z^3 each are independently a single bond, optionally substituted alkylene or optionally substituted alkenylene;

Z^2 is a single bond, optionally substituted alkylene, optionally substituted alkenylene, -CH(OH)-, -S-, -SO-, $-SO_2-$, $-SO_2N(R^6)-$, $-N(R^6)SO_2-$, -O-, $-N(R^6)-$, $-N(R^6)CO-$, $-CON(R^6)-$, -C(=O)-O-, -O-C(=O)- or -CO-;

R^6 is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted aryl or optionally substituted heteroaryl; and

R^5 is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl or optionally substituted heterocycle, and

the other of R^1 and R^2 is hydrogen or a substituent selected from Substituent Group A;

$R^{1'}$ is hydrogen or a substituent selected from Substituent Group A;

$-A^1-$ is ~~$-C(-Y)=C(-R^A)-C(-R^3)=C(-R^4)-$~~, $-C(-Y)=C(-R^A)-C(-R^3)=N-$, $-C(-Y)=C(-R^A)-C(=X)-N(-R^4)$[[,]] or $-C(-Y)=C(-R^A)-N=C(-R^4)-$, ~~$-C(-Y)=C(-R^A)-C(-R^3)-C(-R^4)-$~~, ~~$-C(-Y)=C(-R^A)-O-C(-R^4)-$~~, ~~$-C(-Y)=C(-R^A)-C(-R^3)-O-$~~, ~~$-C(-Y)=C(-R^A)-O-$~~ or ~~$-C(-Y)=C(-R^A)-C(=X)-O-$~~ wherein

X is oxygen or sulfur;

Y is -OH, -SH or $-NH_2$;

R^A is $-C(=Z)R^7$ wherein Z is oxygen or sulfur; and R^7 is a substituent selected from Substituent Group A,

$-NHOH$,

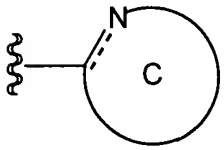
$-N=NR^{10}$ wherein R^{10} is hydrogen, alkyl, acyl, aralkyl, aryl or heteroaryl,

$-NHSO_2R^{12}$ wherein R^{12} is alkyl, aryl, aralkyl, hydroxy or amino,

$-PO(OH)_2$,

$-PO(OH)(R^{13})$ wherein R^{13} is alkyl, aryl or aralkyl, or

a group of the formula:



wherein Ring C is a nitrogen-containing heteroaromatic ring group optionally substituted by one to four of substituents selected from a group consisting of Substituent Group A and a substituent represented by the formula: $-Z^1-Z^2-Z^3-R^5$ wherein Z^1, Z^2, $Z^3$and R^5 are as defined above;
R^3 and R^4 each is independently a substituent selected from Substituent Group A or hydrogen;
Substituent Group A is a group consisting of halogen, optionally substituted alkoxycarbonyl, carboxy, optionally substituted alkyl, optionally substituted alkoxy, alkoxyalkyl, nitro, hydroxy, hydroxyalkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkylsulfonyl, alkyloxysulfonyl, optionally substituted amino, optionally substituted aminosulfonyl, alkylthio, alkylthioalkyl, haloalkyl, haloalkoxy, haloalkoxyalkyl, cycloalkyl, cycloalkenyl, oxo, thioxo, alkylenedioxy, alkylene, alkenylene, nitroso, azido, amidino, guanidine, cyano, isocyano, mercapto, optionally substituted carbamoyl, optionally substituted carbamoylalkyl, optionally substituted sulfamoyl, sulfoamino, sulfo, formyl, alkylcarbonyl, alkylcarbonyloxy, hydrazino, morpholino, phosphono, phosphinico, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocycle, optionally substituted aralkyl, optionally substituted heteroaralkyl, optionally substituted aryloxy, optionally substituted heteroaryloxy,

optionally substituted heterocycleoxy, optionally substituted arylthio, optionally substituted heteroarylthio, optionally substituted aralkyloxy, optionally substituted heteroaralkyloxy, optionally substituted aralkylthio, optionally substituted heteroaralkylthio, optionally substituted aryloxyalkyl, optionally substituted heteroaryloxyalkyl, optionally substituted arylthioalkyl, optionally substituted heteroarylthioalkyl, optionally substituted arylsulfonyl, optionally substituted heteroarylsulfonyl, optionally substituted aralkylsulfonyl, optionally substituted heteroaralkylsulfonyl, optionally substituted alkylcarbonyl alkyl, optionally substituted arylcarbonyl alkyl, alkylsulfonyloxy, sulfamoyloxy and optionally substituted arylcarbonyl;

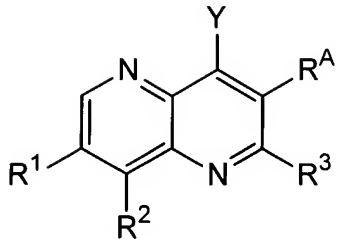
provided that ~~(1) when A^1 is $C(-Y)=C(-R^A)-C(-R^3)=C(-R^4)-$, R^A is not the following substituted carbamoyl; (2) when A^1 is $C(-Y)=C(-R^A)-C(-R^3)=C(-R^4)-$, R^4 is hydrogen; and (3)~~ when $-A^1-$ is $-C(-Y)=C(-R^A)-N=C(-R^4)-$, R^A is not the following substituted carbamoyl; and that, in the substituted carbamoyl ~~of (1) and (3)~~, its N atom is substituted with both a group of the formula: $-L-A^3$ wherein L is a single bond or alkylene, alkenylene, cycloalkylene, alkylcyclo-alkylene, cycloalkylalkylene or alkyl(cycloalkyl)alkylene, each optionally substituted and/or optionally interrupted by a heteroatom, or -O(C=O)- or -C(=O)O-; A^3 is optionally substituted aryl or optionally substituted heterocycle and a group of the formula: $-R^m$ wherein R^m is a hydrogen, optionally substituted alkyl or optionally substituted phenyl at the same time, or [[“]]-R^m[[”]] and [[“]]-L-A^3[[”]] may be combined together with the adjacent N atom to form an optionally substituted heteroring.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The compound of claim 1, represented by the general formula (IV-

1):

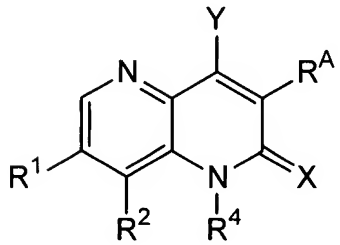


(IV-1)

~~the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof;

wherein Y, R^A, R^1, R^2 and R^3 are as defined in claim 1.

5. (Currently Amended) The compound of claim 1, represented by the general formula (IV-2):

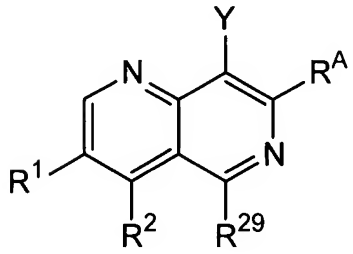


(IV-2)

~~the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof;

wherein X, Y, R^A, R^1, R^2 and R^4 are as defined in claim 1.

6. (Currently Amended) The compound of claim 1, represented by the general formula (V):



(V)

~~the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof;

wherein Y, R^A, R^1 and R^2 are as defined in claim 1;

R^{29} is hydrogen,

carboxy,

$-N(R^{14})(R^{15})$ wherein R^{14} and R^{15} each is independently

hydrogen,

alkyl,

cycloalkyl,

$-(CH_2)_{1-3}OR^{16}$ wherein R^{16} is hydrogen, alkyl, acyl or aryl,

$-C(=O)R^{17}$ wherein R^{17} is hydrogen, hydroxy, alkoxy, alkyl, haloalkyl, alkoxy alkyl, cycloalkyl, alkoxy carbonylmethyl, optionally substituted aryl or optionally substituted heteroaryl,

$-C(=S)R^{17}$ wherein R^{17} is as defined above,

$-SO_2R^{21}$ wherein R^{21} is alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted amino,

R^{14} and R^{15} may be combined together to form an optionally substituted thioamidino group, or

R^{14} and R^{15} may be combined together with the adjacent nitrogen atom to form optionally substituted nitrogen containing heterocycle optionally possessing nitrogen, sulfur and/or oxygen in its ring,

$-(CH_2)_{0-3}OR^{18}$ wherein R^{18} is hydrogen, alkyl, acyl or aryl,

$-(CH_2)_{1-3}CONHR^{19}$ wherein R^{19} is hydrogen, alkyl, acyl or aryl,

$-SO_3R^{20}$ where R^{20} is alkyl or hydroxy,

$-SO_2R^{21}$ wherein R^{21} is alkyl or optionally substituted amino,

$-PO(OH)_2$,

$-PO(OH)(R^{22})$ wherein R^{22} is alkyl,

haloalkyl,

$-(CH_2)_{1-3}COR^{23}$ wherein R^{23} is alkyl or optionally substituted aryl,

$-(CH_2)_{0-3}CN$,

$-R^{41}-COOR^{42}$ wherein R^{41} is alkenyl and R^{42} is hydrogen or alkyl,

$-(CH_2)_{1-3}R^{40}$ wherein R^{40} is optionally substituted aryl or optionally substituted heteroaryl,

optionally substituted aryl,

optionally substituted heteroaryl,

optionally substituted alkynyl,

optionally substituted alkylthio, or

optionally substituted alkoxy.

7-11. (Canceled)

12. (Currently Amended) The compound of claim 1~~, the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof;

wherein R^3 or R^4 is

a carboxy or

$-N(R^{14})(R^{15})$ wherein R^{14} and R^{15} each is independently

hydrogen,

alkyl,

acyl,

$-SO_2R^{21}$ wherein R^{21} is alkyl or optionally substituted amino, or

R^{14} and R^{15} may be combined together with the adjacent nitrogen atom to form nitrogen-containing heterocycle optionally containing sulfur in its ring.

13. (Currently Amended) The compound of claim 1~~, the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof;

wherein R^3 or R^4 is

$-N(R^{14})(R^{15})$ wherein R^{14} and R^{15} each is independently

hydrogen,

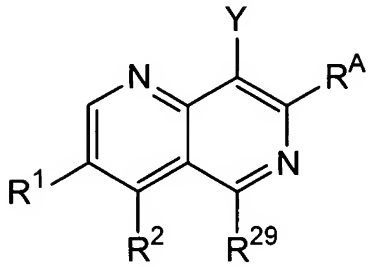
alkyl,

acyl,

$-SO_2R^{21}$ wherein R^{21} is alkyl or optionally substituted amino, or

R^{14} and R^{15} may be combined together with the adjacent nitrogen atom to form a nitrogen-containing heterocycle optionally containing sulfur in its ring.

14. (Currently Amended) The compound of claim 1, represented by the formula:



(V)

~~the prodrug,~~ or the pharmaceutically acceptable salt ~~or solvate~~ thereof;

wherein R^1 is a group of the formula: $-Z^1-Z^2-Z^3-R^5$ wherein Z^1, Z^2, Z^3 and R^5 are as defined in claim 1;

R^2 is hydrogen;

R^{29} is hydrogen, halogen, optionally substituted amino, optionally substituted alkoxy, alkylsulfonyloxy, sulfamoyloxy, alkylthio, alkylsulfonyl, optionally substituted sulfamoyl, optionally substituted alkenyl; optionally substituted alkynyl, optionally substituted aryl, carboxy, alkoxycarbonyl, optionally substituted carbamoyl, acyl or optionally substituted alkyl;

R^A is a group of the formula: $-C(=O)-R^7$ wherein R^7 is hydroxy, optionally substituted alkoxy, optionally substituted amino, optionally substituted alkyl, optionally substituted aralkyl or optionally substituted heterocycleoxy; and

Y is hydroxy.

15. (Currently Amended) The compound of claim 14 ~~, the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof, wherein:

R^1 is benzyl optionally substituted by halogen;

R^2 is hydrogen;

R^{29} is hydrogen, halogen, optionally substituted amino, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, carboxy, alkoxycarbonyl or optionally substituted carbamoyl;

R^A is a group of the formula: -C(=O)-R^7 wherein R^7 is

hydroxy,

optionally substituted alkoxy,

NR^8R^9 wherein R^8 and R^9 each is independently hydrogen, optionally substituted alkyl, optionally substituted alkoxy or optionally substituted amino,

optionally substituted alkyl or

optionally substituted heterocycleoxy; and

Y is hydroxy.

16. (Currently Amended) The compound of claim 14 ~~, the prodrug,~~ or the pharmaceutically acceptable salt~~, or the solvate~~ thereof, wherein:

R^1 is benzyl optionally substituted by halogen;

R^2 is hydrogen;

R^{29} is hydrogen, halogen, optionally substituted amino, optionally substituted alkenyl; optionally substituted alkynyl, carboxy, alkoxycarbonyl or optionally substituted carbamoyl;

R^A is a group of the formula: -C(=O)-R^7 wherein R^7 is

hydroxy,

optionally substituted alkoxy,

NR^8R^9 wherein R^8 is hydrogen and R^9 is

hydrogen,

alkyl optionally substituted by alkoxy or

amino optionally substituted alkyl, or

optionally substituted heterocycleoxy; and

Y is hydroxy.

17. (Currently Amended) The compound of claim 14 ~~, the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof, wherein:

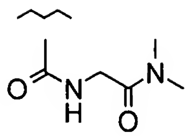
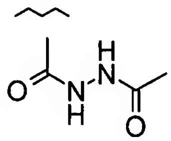
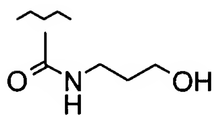
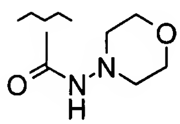
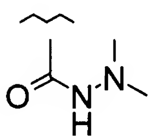
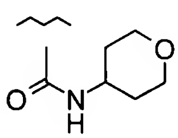
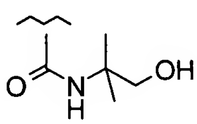
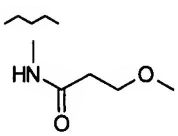
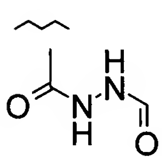
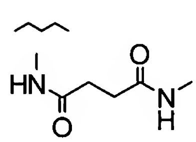
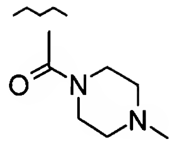
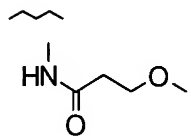
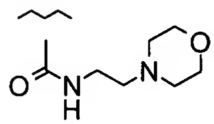
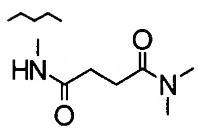
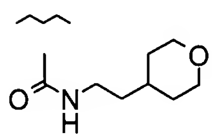
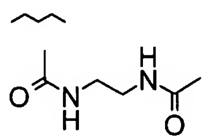
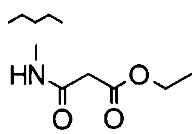
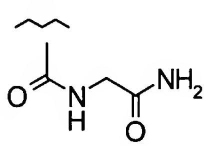
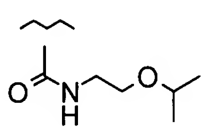
R^1 is benzyl optionally substituted by halogen;

R^2 is hydrogen;

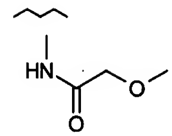
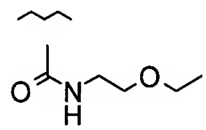
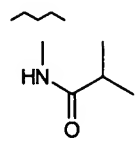
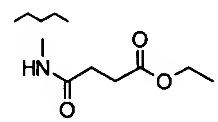
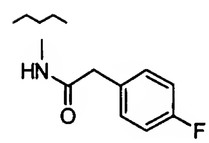
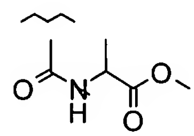
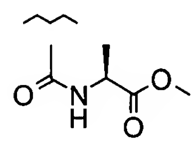
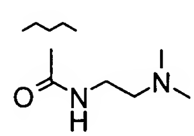
R^A is a group of the formula: $-C(=O)-R^7$ wherein R^7 is hydroxy, methoxy, $-NH_2$, $-NHCH_2CH_2OCH_3$, $-NHOCH_3$, $-NHN(CH_3)_2$, $-NHCH_2CH_2OCH_3$, $-(CH_2)_3OCH_3$, $-O(CH_2)_3OCH_3$, $-OCH(CH_3)CH_2OCH_3$, optionally substituted piperidyloxy or optionally substituted tetrahydropyranyloxy;

Y is hydroxy; and

R^{29} is any one of the following groups:

–COOH

an optionally substituted amino selected from the group consisting of -$NHSO_2Me$, -NHCOMe, -$NHSO_2NMe_2$, -$NHSO_2iPr$, -$NHSO_2$-Ph-4-F, -$NHSO_2Et$, -$NHSO_2Bn$, -$NHSO_2CH_2CF_3$, -$NHSO_2CH_2CO_2Me$, -$NHSO_2CHCH_2iPr$, -$NHSO_2CHCH_2Ph$, -$NHCOCH_2CH_2OMe$, -NHCOPh, -NHCOEt, -NHCO-c-Pr, -NHCO-c-hex, -$NHCOCH_2CO_2Et$, -NHCO-2-thienyl, -NHCO-5-isoxazolyl, -$NHCONMe_2$, -$NHCO_2Et$, -$NHCOCO_2Et$, -$NHCOCH_2CH_2CO_2Me$, N-succinimide, -$NHCOCONMe_2$, -NHCO CH_2CONMe_2, $NHCOCONH_2$, -$NHCO_2Me$, -NHCO-2-pyrimidine, -NHCO-2-furan, -NHCO-3-triazol-1-Me, -$NHCO_2iPr$, -$NHCO_2CH_2CH_2OMe$, p-toluenesulfonylamino, (2-thiazole-4-yl)acetylamino, 2-(dimethylcarbamoyl)acetylamino, thiazole-4-carbonylamino, methylaminooxazalylamino and (thiazole-5-carbonyl)amino,

an optionally substituted alkynyl selected from the group consisting of -$C{\equiv}CCH_2OMe$, -C≡CPh, -C≡C-N-Pr, -$C{\equiv}CCO_2Me$, -$C{\equiv}CCH_2NHAc$, -$C{\equiv}CCH_2NHSO_2Me$, -C≡C-c-pentyl(1-OH) and -$C{\equiv}CCH_2OH$,

an optionally substituted carbamoyl selected from the group consisting of -CONH-iPr, -$CONHCH_2CH_2OMe$, -CONH-N-morpholyl, -CONHNHAc, -CO-(4-Me-piperazine), -CONH-(2-thiazol), -$CONHCH_2CONMe_2$, -$CONH(CH_2)_3OCOCF_3$, -$CONEt_2$, -CO-morpholyl, -$CONHSO_2Me$, -$CONMeSO_2Me$ and -$CONHSO_2Ph$,

-CF_3, -COMe, -SMe, -SO_2Me, -OMe, -OCH_2CO_2Me, -OCH_2CH_2OMe, -$CH_2CH{=}CH_2$, -CN, 4-piperidinyl, -NH_2, hydrogen, Cl, Br, COOMe, 2-oxo-pyrrolidinyl, 2-oxopiperidyl or 4-(hydroxymethyl)phenyl.

18. (Currently Amended) The compound of claim 14 ~~, the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof, wherein:

R^1 is a benzyl optionally substituted by halogen;

R^2 is hydrogen;

R^A is a group of the formula: -C(=O)-R^7 wherein R^7 is methoxy, -$NHCH_2CH_2OCH_3$, -NH_2, -$NHN(CH_3)_2$, -$O(CH_2)_3OCH_3$, -$OCH(CH_3)CH_2OCH_3$, optionally substituted piperidyloxy

(substituent: acetyl or methanesulfonyloxy) or optionally substituted tetrahydropyranyloxy;

Y is hydroxy; and

R^{29} is

an optionally substituted amino selected from the group consisting of -NHCOMe, $-NHSO_2NMe_2$, $-NHCOCH_2CH_2OMe$, -NHCOPh, $-NHCOCH_2CO_2Et$, -NHCO-2-thienyl, $-NHCO_2Et$, $-NHCOCH_2CH_2CO_2Me$, $-NHCOCONMe_2$ and $-NHCOCONH_2$),

an optionally substituted alkynyl selected from the group consisting of $-C\equiv CCH_2OMe$, $-C\equiv CCH_2NHAc$, $-C\equiv CCH_2NHSO_2Me$, -C≡C-c-pen-(1-OH) and $-C\equiv CCH_2OH$,

$-CH_2CH=CH_2$, 4-piperidyl or hydrogen.

19-27. (Canceled)

28. (Currently Amended) A pharmaceutical composition comprising the compound of claim 1~~, a prodrug,~~ or a pharmaceutically acceptable salt ~~or a solvate~~ thereof together with a pharmaceutically acceptable carrier or diluent.

29-33. (Canceled)

34. (Withdrawn) A mixed composition for anti-HIV comprising the pharmaceutical composition of claim 28 together with a reverse transcriptase inhibitor and/or a protease inhibitor.

35. (Canceled)

36. (Withdrawn) A method for preventing or treating AIDS or AIDS related complications,

which comprises administering an effective amount of the pharmaceutical composition of claim 28 to a patient in need thereof.

37. (Withdrawn) A method for preparing a pharmaceutical composition for preventing or treating AIDS or AIDS-related complications, which comprises mixing the compound of claim 1 with a pharmaceutically acceptable carrier or diluent.

38-42. (Canceled)